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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/684,748

10/14/2003

Bill L. Miller

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EXAMINER

WEIER, ANTHONY J

ART UNIT

PAPER NUMBER

1761

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/684,748

Applicant(s)

MILLER ET AL.

Examiner

Anthony Weier

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1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 18, 19 and 35-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 20-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 12-17 and 20-34) in the reply filed on 10/10/06 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 and 20-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 55-88662 (JP '662).

JP '662 discloses a process of preparing a soybean protein material wherein soybean material is extracted (inherently blended) with a mixture of alcohol (methanol, E10-E04L) and a reducing agent (e.g. sodium sulfite; see Examples) at a temperature of, for example, 70 C.

JP '662 is silent regarding the holding time as called for in the instant claims. However, such determination would have been well within the purview of a skilled artisan, and it would have been obvious to one having ordinary skill in the art at the time of the invention to have arrived at such time as a result effective variable depending on the extent of extraction desired from the soybean material.

Claims further call for the use of temperature greater than about 90 C or between about 100 C and about 121 C. Pressure can be used to effect a certain heating, and

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the instant claims further call for the use of pressures of 10-30 lb/in². Although JP '662 only recited temperatures as high as 75 C, same does not appear to respect using even higher temperature. The inverse relationship of time vs. temperature when it comes to heating is notoriously well known. In other words, one may heat an article to a desired degree in less time by increasing the temperature used. It would have been further obvious to have arrived at the particular temperature called for in the instant claims as a matter of preference depending on the particular heating facilities available or the time constraints in preparing the product. As for the pressure employed, it would have been further obvious to have arrived at same through routine experimental optimization.

4. Claims 1-4, 8-15, 20, 21, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrara et al.

Ferrara et al discloses a method preparing a particular soy protein product comprising, inherently, blending a soybean protein source with alcohol (isopropyl; full miscible in water) and also a reducing agent (i.e. HCN) at a temperature above ambient temperature.

The claims call for alcohol other than that called for in, for example, claim 9. However, methanol, ethanol, and propanol are all similar to isopropyl alcohol, and, absent a showing of unexpected results, it would have been further obvious to have substituted such alternative alcohols as a matter of preference depending on the availability of same or cost involved.

Ferrara et al is silent regarding the holding time as called for in the instant claims. However, such determination would have been well within the purview of a

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skilled artisan, and it would have been obvious to one having ordinary skill in the art at the time of the invention to have arrived at such time as a result effective variable depending on the extent of extraction desired from the soybean material.

Claims further call for the use of temperature greater than about 90 C or between about 100 C and about 121 C. Pressure can be used to effect a certain heating, and the instant claims further call for the use of pressures of 10-30 lb/in². The inverse relationship of time vs. temperature when it comes to heating is notoriously well known. In other words, one may heat an article to a desired degree in less time by increasing the temperature used. It would have been further obvious to have arrived at the particular temperature called for in the instant claims as a matter of preference depending on the particular heating facilities available or the time constraints in preparing the product. As for the pressure employed, it would have been further obvious to have arrived at same through routine experimental optimization.

5. Claims 1-4, 8-15, 20, 21, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melnychyn et al.

Melnychyn et al discloses a soy protein product wherein a soy protein material is treated with by mixing same with a reducing agent and an alcohol (e.g. ethanol) at a temperature above ambient temperature and holding same for a period of, for example, 5 minutes (see Examples).

Melnychyn et al is silent regarding the holding times greater than 10 minutes as called for in the instant claims. However, such determination would have been well within the purview of a skilled artisan, and it would have been obvious to one having

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ordinary skill in the art at the time of the invention to have arrived at such time as a result effective variable depending on the extent of extraction desired from the soybean material.

Claims further call for the use of temperature greater than about 90 C or between about 100 C and about 121 C. Pressure can be used to effect a certain heating, and the instant claims further call for the use of pressures of 10-30 lb/in². The inverse relationship of time vs. temperature when it comes to heating is notoriously well known. In other words, one may heat an article to a desired degree in less time by increasing the temperature used. It would have been further obvious to have arrived at the particular temperature called for in the instant claims as a matter of preference depending on the particular heating facilities available or the time constraints in preparing the product. As for the pressure employed, it would have been further obvious to have arrived at same through routine experimental optimization.

6. Claims 16, 17, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 55-88662, Melnychyn, or Ferrara et al taken together with WO 95/04467.

The claims further call for combining the proteinaceous product with an animal feed component. However, it is notoriously well known to include a protein source, such as for example, a soybean protein material, in animal feed compositions as taught, for example, by WO 95/04467(pages 3 and 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to have included said soybean protein concentrate in a animal feed composition as a matter of convention.

It is considered inherent that the soybean products of Ferrara et al, JP 55-88662, and Melnychyn (and subsequent inclusion in an animal feed composition) would have essentially no alcohol as a result of the drying step further called for in each reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

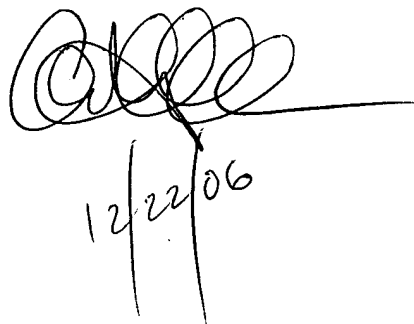
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier
Primary Examiner
Art Unit 1761

Anthony Weier
December 22, 2006



12/22/06